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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

H. Michael SHEPARD

Title:

METHODS FOR TREATING

THERAPY-RESISTANT

TUMORS

Appl. No.:

10/048,033

International

7/21/2000

Filing Date: 371(c) Date:

Examiner: Crane, Lawrence E.

Art Unit:

1623

Confirmation

2767

Number:

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §1.56

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56.

A copy of each non-U.S. patent document and each non-patent document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR

§1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(c), before the mailing date of either a final action under 37 CFR §1.113, a notice of allowance under 37 CFR §1.311, or an action that otherwise closes prosecution in the application.

RELEVANCE OF EACH DOCUMENT

U.S. Patent Reference #1 (6,589, 941) is the equivalent of foreign-language reference #15 (WO 96/23506). An English translation of the foreign-language document is not readily available. However, the absence of such translation does not relieve the PTO from its duty to consider the submitted foreign language document (37 CFR §1.98 and MPEP §609).

Applicants respectfully request that each listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

<u>FEE</u>

Fees in the amount of \$180.00 in accordance with 37 CFR §1.17(p) to cover the fee associated with an information disclosure statement under 37 CFR §1.97(c) are being paid by credit card via EFS-Web.

SVCA_71279.1

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by the credit card payment instructions in EFS-Web being incorrect or absent, resulting in a rejected or incorrect credit card transaction, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted,

Antoinette F. Konski Attorney for Applicant

Registration No. 34,202

Date

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(650) 856-3710

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	Substitute t	for form 1449/	PTO		Complete if Known				
	INFORMATI	ON DISCLO	SURE	Application Number	10/048033	***************************************			
	STATEMEN	T BY APPL	ICANT	Filing Date	7/21/2000				
	Date Submitte	od: August 2	0. 2007	First Named Inventor	H. Michael Shepard				
	Date Submitte	ea. August 3	0, 2007	Art Unit	1623				
(use as many sheets as necessary)				Examiner Name	Crane, Lawrence E.				
Sheet	1	of	5	Attorney Docket Number	060925-0601				

U.S. PATENT DOCUMENTS							
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of	Pages, Columns, Lines, Where Relevant		
Initials*	No. ¹	Number-Kind Code ² (if known)	MM-DD-YYYY	Cited Document	Passages or Relevant Figures Appear		
************************	P1	6,589,941	Fahrig et al.	07-08-2003			
	P2	6,599,499	Rosen et al.	07-29-2003			
	P3	6,677,314	Klecker et al.	01-13-2004			
	P4	6,677,315	Klecker et al.	01-13-2004			
	P5	6,682,715	Klecker et al.	01-27-2004			
	P6	6,683,045	Klecker et al.	01-27-2004			
	P7	6,683,061	Shepard et al.	01-27-2004			
	P8	6,703,374	Klecker et al.	03-09-2004			
	P9	2002/0022001	Klecker et al.	02-21-2002			
	P10	2002/0034473	Klecker et al.	03-21-2002			
	P11	2002/0119094	Klecker et al.	08-29-2002			
	P12	2002/0165199	Klecker et al.	11-07-2002			
	P13	2003/0049201	Klecker et al.	03-13-2003			
	P14	2003/0095921	Klecker et al.	05-22-2003			

	UNPUBLISHED U.S. PATENT APPLICATION DOCUMENTS								
Examiner Initials*	Cite No. ¹	U.S. Patent Application Document Serial Number-Kind Code ² (if known)	Filing Date of Cited Document MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear				

FOREIGN PATENT DOCUMENTS									
Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear									

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	Substitute for form	1449/F	РТО	Complete if Known			
	INFORMATION DIS	SCLO	SURE	Application Number	10/048033		
	STATEMENT BY A	APPLIC	CANT	Filing Date	7/21/2000		
	Data Cubmittadi Aus	at 20	2007	First Named Inventor	H. Michael Shepard		
	Date Submitted: Aug	jusi si	J, 2007	Art Unit	1623		
,	(use as many sheets	as nec	cessary)	Examiner Name	Crane, Lawrence E.		
Sheet	2	of	5	Attorney Docket Number	060925-0601		

		NON PATENT LITERATURE DOCUMENTS	
Examin er Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	Т ⁶
	D16	BALZARINI et al. "Highly Selective Cytostatic Activity of (E)-5-(2-Bromovinyl)-2'-deoxyuridine Derivatives for Murine Mammary Carcinoma (FM3A) Cells Transformed with the Herpes Simplex Virus Type 1 Thymidine Kinase Gene" Molecular Pharmacology (1985) 28:581-587	
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Wayne 6117	D21	BRONZERT, D.A. "Purification and Properties of Estrogen-responsive Cytoplasmic Thymidine Kinase from Human Breast Cancer" Can. Res. (Feb. 1981) 41:604-610	**********
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	D25	COSTI et al. "Phthalein derivatives as a new tool for selectivity in thymidylate synthase inhibition" J. Med. Chem. 42(12):2112-2124 (1999)	
	D26	COSTI, et al. "Thymidylate Synthase Inhibition: A Structure-Based Rationale for Drug Design" Medical Research Review 18(1):21-42 (1998)	
	D27	CURT "Cancer drug development: new targets for cancer treatment" Oncologist 1(3):II-III (1996)	

Examiner Date	
Signature Considered	

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	STATEMENT BY A	APPLI	CANT	Filing Date	7/21/2000		
	Date Submitted: Aug	auct 2	0 2007	First Named Inventor	H. Michael Shepard		
	Date Submitted. Aug	yusi ə	0, 2007	Art Unit	1623		
	(use as many sheets	as ne	cessary)	Examiner Name	Crane, Lawrence E.		
Sheet	3	of	5	Attorney Docket Number	060925-0601		

 	,	NON PATENT LITERATURE DOCUMENTS	
Examin er Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T€
-	D28	Declerc et al. "Antiviral Activity of Novel Deoxyuridine Derivatives" Current Chemotherapy: Proceedings of the International Congress of Chemotherapy 1:352-354 (September 18, 1978)	
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	D31	DRAKE et al. "Resistance to Tornudex (ZD1694): Multifactorial in Human Breast and Colon Carcinoma Cell Lines" Biochem. Pharmacol. 51(10):1349-1355 (1996)	
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	D34	GRIENGL et al. "Phosphonoformate and phosphonoacetate derivatives of 5-substituted 2'deoxyuridines: Synthesis and antiviral activity" J. Med. Chem. 31(9):1831-1839 (1988)	
×*************************************	D35	HENGSTSCHLAGER, M. and E. WAWRA "Cytofluorometric determination of thymidine kinase activity in a mixture of normal and neoplastic cells" Br. J. Cancer (1993) 67:1022-1025	
1444	D36	JOHNSTON et al. "Thymidylate synthase gene and protein expression correlate and are associated with response to 5-fluorouracil in human colorectal and gastric tumors" Cancer Res. 55:1407-1412 (1995)	
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	D38	LEICHMAN "Thymidylate synthase as a predictor of response" Oncol. 12(8Suppl.6):43-47 (August 1998)	
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	D40	LIVINGSTON et al. "Studies with tetrahydrohomofolate and thymidylate synthetase from amethopterin- resistant mouse leukemia cells" Biochem. 7(8):2814-2818 (1968)	

Examiner Date Signature Considered			
Signature Considered	Examiner	Date	
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	Substitute for for	rm 1449/F	PTO	Complete if Known			
	INFORMATION I	DISCLO	SURE	Application Number	10/048033		
	STATEMENT BY	Y APPLI	CANT	Filing Date	7/21/2000		
	Data Submittad: A	\uauat 2/	3 2007	First Named Inventor	H. Michael Shepard		
	Date Submitted: A	August 30	J, 200 <i>1</i>	Art Unit	1623		
(use as many sheets as necessary)				Examiner Name	Crane, Lawrence E.	-	
Sheet	4	of	5	Attorney Docket Number	060925-0601		

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	D41	LOOK et al. "Increased thymidine kinase and thymidylate synthase activities in human epithelial ovarian carcinoma" Anticancer Res. 17:2353-2356 (1997)					
	D42	MIAO et al. "A Stepwise One Pot Synthesis of Alkyl Thiophosphoramidate Derivatives of Nucleosides" Synthetic Communications 32(8):1159-1167 (2002)					
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	D49	TSAVARIS et al. "Multimodal biochemical modulation of 5-fluorouracil activity in advanced colorectal cancer with allopurinol, folinic acid and dipyridamol" J. Chemother. 2(2):123-126 (1990)					
	D50	van LAAR "Therapeutic efficacy of fluoropyrimidines depends on the duration of thymidylate synthase inhibition in the murine colon 26-B carcinoma tumor model" Clin. Cancer Res. 2(8):1327-1333 (1996)					
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	D52	VLAYKAVA et al. "Increased Thymidylate Synthase Gene Expression in Metastatic Melanoma" Oncology 54:146-152 (1997)					
	D53	WHALEN et al. "Human glutathione S-transferases" Seminars in Liver Disease 18(4):345-358 (1998)					

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449/PTO Complete if Known **INFORMATION DISCLOSURE** Application Number 10/048033 STATEMENT BY APPLICANT 7/21/2000 Filing Date **First Named Inventor** H. Michael Shepard Date Submitted: August 30, 2007 Art Unit 1623 (use as many sheets as necessary) **Examiner Name** Crane, Lawrence E. 060925-0601 5 Attorney Docket Number Sheet of 5

NON PATENT LITERATURE DOCUMENTS							
Examin er Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	т				
	D54	WILDNER et al. "Enzyme prodrug gene therapy: Synergistic use of the herpes simplex virus-cellular thymidine kinase/ganciclovir system and thymidylate snythase inhibitors for the treatment of colon cancer"n Cancer Res. 59(20):5233-5238 (1999)					
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